

**EFFECTIVENESS T-SPONGE PROGESTERON COMBINATION WITH
PMSG AND HCG AGAINST THE ONSET OF ESTRUS, SERUM
PROGESTERON LEVEL AND PREGNANCY RATE
PERANAKAN ETAWA GOAT**

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ABSTRACT

The aim of this study was to prove the effectiveness of the use a combination T-sponge progesterone with PMSG and hCG in synchronization ovulation of Peranakan Etawa goat. This study used 18 female peranakan etawa goats which have been confirmed not pregnant, and healthy condition, divided into three treatment groups P₀ (injection PGF2 α 7,5 mg), P₁ (T-sponge progesterone 60 mg) and P₂ (T-sponge progesterone 75 mg), sponge was removed on day 14. At the time of intravaginal sponge removal followed by injection PMSG 400 IU. Observation onset of estrus was done with teaser stud. On day 16, hCG 250 IU was injected and artificial insemination (IB) was done with fresh semen. Blood sampling was done on day 7 and 22 post-insemination (early pregnancy). Ultrasound pregnancy diagnosis was performed on day 30 post insemination. The onset of estrus among the groups (P₀, P₁ and P₂) showed no significant difference ($P \geq 0,05$), respectively P₀ (24.0167 ± 2.60); P₁ (22.2833 ± 1.50); and P₂ (21.9167 ± 1.93). The results of progesterone levels (7 and 22 days) of post insemination were significant differences with significant values of 0.00 ($P < 0.05$). There was increase progesterone levels from day 7 to day 22 post insemination but between treatment groups with day 7 and day 22 there was no significant difference ($P \geq 0,05$). Examination of pregnancy rates statistic showed 100% in each treatment. It indicated that T-sponge progesterone combination with PMSG can be an alternative in synchronization estrus besides using PGF2 α .